

IN THE CLAIMS

1. (Currently Amended) A method of archiving a database,
comprising ~~the steps of~~:
storing a plurality of archive logs comprising a plurality of transactions on
an operational database;
transmitting a plurality of asynchronous streams to a backup database
wherein a first asynchronous stream of said plurality of asynchronous streams
is transmitted asynchronously at a first transmission rate and with respect to a
second asynchronous stream of said plurality of asynchronous streams ~~is~~
~~transmitted at a second transmission rate~~, wherein each asynchronous stream
of the plurality of asynchronous streams correspond corresponds to a
particular archive log of the [[a]] plurality of archive logs, and wherein the
plurality of asynchronous streams are transmitted simultaneously; and
updating the backup database with the plurality of transactions.

2. (Cancelled)

3. (Currently Amended) The method of Claim 1 further comprising
~~the steps of~~:

comparing a plurality of files corresponding to a the backup database to
a plurality of files of the operational database to determine whether there are
any corrupt or missing files;

automatically transferring files from the operational database to the backup database which have been corrupted or deleted.

4. (Currently Amended) The method of Claim 1 further comprising ~~the step of~~ transmitting a predetermined number of streams in parallel, wherein the number is set by a user in a config file.

5. (Currently Amended) The method of Claim 1, wherein the transmitting ~~[[step]]~~ runs in cron.

6. (Currently Amended) The method of Claim 1 further comprising ~~the step of~~ running streaming rsynchs for copying data from the operational database to the backup database.

7. (Currently Amended) The method of Claim 1 further comprising ~~the step of~~ constructing an array of the plurality of archive logs which are to be transferred from the operational database to the backup database.

8. (Currently Amended) A method of performing automatic recoveries on an archived database, comprising ~~the steps of~~:

comparing files residing on an operational database to files residing on a backup database;

determining whether there are any missing files by checking for files which exist on the operational database and which do not exist on the backup database;

recopying files from the operational database over to the backup database which are missing;

determining whether there are any corrupted files by checking for files which have a different size on the operational database as compared to corresponding file residing on the backup database;

recopying files from the operational database to the backup database which have become corrupted, wherein the automatic recovery process is run by a program automatically in the background without requiring initiation and is run independent of a complete system backup.

9. (Currently Amended) The method of Claim 8 further comprising ~~the step of~~ transferring a plurality of files simultaneously from the operational database to the backup database.

10. (Original) The method of Claim 9, wherein the plurality of files are streamed according to an rsync command.

11. (Currently Amended) The method of Claim 8, wherein the comparing ~~[[step]]~~ comprises ~~the step of~~ performing a rolling checksum.

12. (Currently Amended) An archival system, comprising:

a backup database for storing a plurality of archive logs which represent data stored on an operational database;

a memory for storing instructions on how data is to be transferred from the operational database to the backup database, wherein the instructions include commands which cause the operational database to stream a plurality of archive logs asynchronously to be copied over to the backup database such that the backup database is updated with the data wherein a first asynchronous stream of said plurality of asynchronous streams is transmitted asynchronously at a first transmission rate and with respect to a second asynchronous stream of said plurality of asynchronous streams ~~is transmitted at a second transmission rate, wherein each asynchronous stream of the plurality of asynchronous streams corresponds to a particular archive log of the plurality of archive logs,~~ and wherein the plurality of asynchronous streams are transmitted simultaneously.

13. (Original) The archival system of Claim 12 further comprising instructions stored in memory which automatically compares files on the operational database against files stored on the backup database to determine whether there are any missing or corrupted files and which automatically recopies files from the operational database to the backup database which have been deleted or corrupted.

14. (Currently Amended) A computer-readable medium having stored thereon instructions for transferring data from an operational database to a backup database for archival of data, comprising ~~the steps of:~~

storing a plurality of archive logs comprising a plurality of transactions on the operational database;

transmitting a plurality of asynchronous streams to the backup database wherein a first asynchronous stream of said plurality of asynchronous streams is transmitted asynchronously at a first transmission rate and with respect to a second asynchronous stream of said plurality of asynchronous streams ~~is transmitted at a second transmission rate~~, wherein each asynchronous stream of the plurality of asynchronous streams ~~correspond~~ corresponds to a particular archive log of the ~~[[a]]~~ plurality of archive logs, and wherein the plurality of asynchronous streams are transmitted simultaneously; and updating the backup database with plurality of transactions.

15. (Cancelled)

16. (Currently Amended) The computer-readable medium of Claim 14 further comprising ~~the steps of:~~

comparing a plurality of files corresponding to a said backup database to a plurality of files of an operational database to determine whether there are any corrupt or missing files;

automatically transferring files from the operational database to the backup database which have been corrupted or deleted.

17. (Currently Amended) A computer-readable medium having stored thereon instructions for performing automatic recoveries on an archived database, comprising ~~the steps of~~:

comparing files residing on an operational database to files residing on a backup database;

determining whether there are any missing files by checking for files which exist on the operational database and which do not exist on the backup database;

recopying files from the operational database over to the backup database which are missing;

determining whether there are any corrupted files by checking for files which have a different size on the operational database as compared to corresponding file residing on the backup database;

recopying files from the operational database to the backup database which have become corrupted, wherein the automatic recovery process is run by a program automatically in the background without requiring initiation and is run independent of a complete system backup.

18. (Currently Amended) The computer-readable medium of Claim 17, wherein the instructions further comprise ~~the step of~~ transferring a plurality of files simultaneously from the operational database to the backup database.

19. (Original) The computer-readable medium of Claim 17, wherein the plurality of files are streamed according to an rsync command.

20. (Currently Amended) An apparatus for archiving a database, comprising:

means for storing a plurality of archive logs comprising a plurality of transactions on an operational database;

means for transmitting a plurality of asynchronous streams to a backup database wherein a first asynchronous stream of said plurality of asynchronous streams is transmitted asynchronously ~~at a first transmission rate and with respect to~~ a second asynchronous stream of said plurality of asynchronous streams ~~is transmitted at a second transmission rate~~, wherein each asynchronous stream of the plurality of asynchronous streams correspond ~~corresponds~~ to a particular archive log of the ~~[[a]]~~ plurality of archive logs, and wherein the plurality of asynchronous streams are transmitted simultaneously; and

means for updating the backup database with plurality of transactions.

21. (Cancelled)

22. (Previously Presented) The apparatus of Claim 21 further comprising:

means for comparing a plurality of files corresponding to the backup database to a plurality of files of an operational database to determine whether there are any corrupt or missing files;

means for automatically transferring files from the operational database to the backup database which have been corrupted or deleted.

23. (Previously Presented) An apparatus for performing automatic recoveries on an archived database, comprising:

means for comparing files residing on an operational database to files residing on a backup database;

means for determining whether there are any missing files by checking for files which exist on the operational database and which do not exist on the backup database;

means for recopying files from the operational database over to the backup database which are missing;

means for determining whether there are any corrupted files by checking for files which have a different size on the operational database as compared to corresponding file residing on the backup database;

means for recopying files from the operational database to the backup database which have become corrupted, wherein the automatic recovery

process is run by a program automatically in the background without requiring initiation and is run independent of a complete system backup.

24. (Previously Presented) The apparatus of Claim 23 further comprising means for transferring a plurality of files simultaneously from the operational database to the backup database.